

Patent Claims:

1 1. Insulation arrangement for pipes, especially for pipes of  
2 a pneumatic system in a passenger transport aircraft, which  
3 essentially comprises at least one insulation layer (6) as  
4 well as an outer sheath consisting of titanium foil (31),  
5 characterized in that the outer sheath (3) is connected, in  
6 a first end section (32) and in a second end section (33),  
7 respectively with a termination profile (7) and thereby a  
8 shell (9) with at least one longitudinal seam (13) is  
9 formed, into which shell the insulation layer (6) is  
10 insertable.

1 2. Insulation arrangement according to claim 1, characterized  
2 in that the termination profile (7) is embodied as a  
3 Z-profile, which is connected with an upper web (71) with  
4 the titanium foil (31), and a middle web (72) as well as a  
5 lower web (73) form a receiver for the insulation  
6 layer (6).

1 3. Insulation arrangement according to one of the claims 1 or  
2 2, characterized in that the shell (9) is embodied as a  
3 full shell, which is opened at the longitudinal seam (13)  
4 and slipped over the pipe (2), and is closed by means of  
5 joint webs (14, 14') provided on the longitudinal  
6 seam (13).

1 4. Insulation arrangement according to one of the claims 1 or  
2 2, characterized in that the shell (9) is embodied as a  
3 half shell, which comprises two longitudinal seams, the two  
4 half shells are positioned on the pipe (2), and the  
5 insulation is closed by means of joint webs (14, 14')  
6 provided on the longitudinal seams.

1 5. Insulation arrangement according to one of the claims 1 to  
2 4, characterized in that the connection on the longitudinal  
3 seam (13) between the joint webs (14, 14') is produced by  
4 means of adhesive bonding or welding.

1 6. Insulation arrangement according to one of the claims 1 to  
2 5, characterized in that a securing web (15) for the  
3 form-locking securing of the connection is provided in the  
4 area of the longitudinal seam connection (13).

1 7. Insulation arrangement according to one of the claims 1 to  
2 6, characterized in that the titanium foil (31) comprises  
3 a profiled or patterned configuration (4).

1 8. Insulation arrangement according to one of the claims 1 to  
2 7, characterized in that the outer sheath (3) comprises  
3 outlet holes (5), warning wires (11) are arranged above the  
4 outlet holes (5), and an anti-rotation securement (8) is  
5 provided, which prevents a position change between the pipe  
6 (2) and the shell (9).

1 9. Insulation arrangement according to claim 8, characterized  
2 in that the anti-rotation securement (8) is formed through  
3 a partial adhesive connection, preferably as a fillet joint  
4 seam (81) of a temperature resistant adhesive or a paste  
5 between the outside profile (7) and the pipe (2).

1 10. Insulation arrangement according to one of the claims 1 to  
2 8, characterized in that stiffening elements (12) are at  
3 least partially applied onto the inner side of the titanium  
4 foil (31).